WINDOW QUESTIONS:

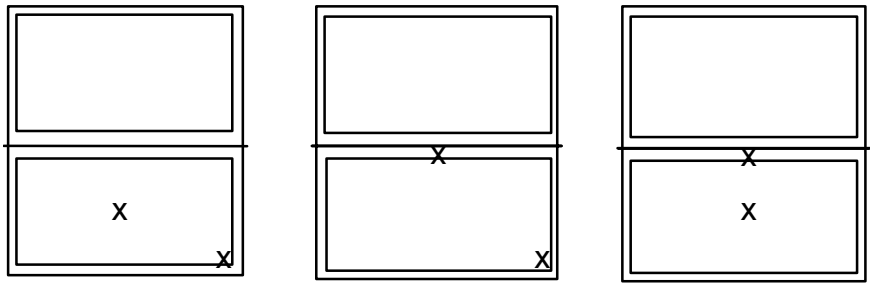
WI1: (Q14:) Is comparative analysis acceptable for windows?

A: Yes, provided the largest window manufactured is tested. All smaller windows having the same system can be approved through comparative/rational analysis. This only applies to non-impact resistant windows.

WI2: (Q15:) Reserved.

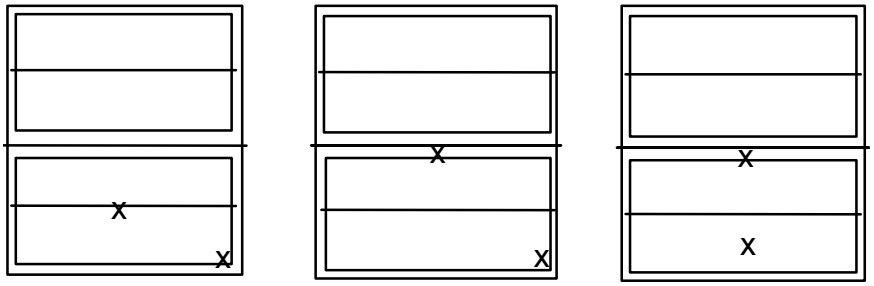
WI3: (Q18:) How many times shall a single hung window be impacted when testing for large missile approval?

A: Two (2) times as shown below for each required specimen.

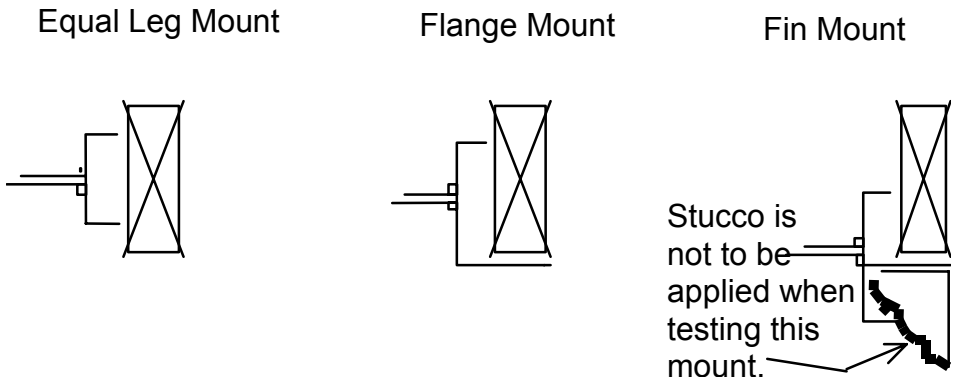


WI4: (Q19:) How many times shall a double hung window be impacted when testing for large missile approval?

A: Two (2) times as shown below for each required specimen.



WI5: (Q79:) Do I have to test three specimens of each of the following mounting conditions for the same series of windows?



A: No, you may test one of each of the shown configurations shown to comply with the three specimens required. Also, keep in mind that the fastening system used to anchor the window for the test is the anchoring system that will be approved for each of the configurations shown. These anchoring systems must be specified in the drawings of the window, and verified by the certified laboratory conducting the test.

WI6: (Q 81:) If I manufacture a line of windows that have the exact same extrusions but only vary in the thickness of glass and type of glass. What would be the minimum amount of testing I can do in order to qualify all the different glass if I am not qualifying for impact?

A: For example, if all your extrusions are the same, and you provide a 1/8", 3/16", and 1/4" annealed glass thickness, the following is what you can do to qualify the window line. First, test three specimens using the thickest glass for air infiltration, 1/2 test load, design load, water at the maximum that the extrusion will take (this should be to the corresponding pressure of the highest design pressure obtained among all the different glass thickness), full test pressure, and forced entry. Second, you may test the specimen of 3/16" glass for structural loads only. Third, you may test the 1/8" glass specimen for structural loads only. Keep in mind that the maximum design pressure obtained from these two last series of tests must fall in range for the corresponding water test performed in the 1/4" glass. The following is the resultant testing.

1/4"	Air	- 1/2Test	- Design	- Water(at max)	- Test pressure	- Forced entry
3/16"	Structural						
1/8"	Structural						

Note that the only thing that can change is the thickness of glass or type of glass.

WI7: (Q114:) When down-sizing a window, industry has been under the assumption that you may use the glass chart of Chapter 35 of the South Florida Building Code. How is Dade County addressing the glass thickness of windows when comparative analysis is used?

A: The glass chart in the South Florida Building Code is only to be used for designing the window and obtaining the minimum glass thickness to use on particular glass areas. The table is not to be used when downsizing a window to change the glass thickness without performing tests.

Using a picture window as a simple example, the following will apply. First, one type of extrusion, and glazing method/system is used to qualify this window; if components of the window system change, (other than the glass/glass thickness) then the product shall be treated under a separate product approval.

With respect to the testing, this window will not qualify for impact, therefore PA201 and PA203 do not apply. Only PA202 will be used. Test three (3) samples of the largest size window with the required glass thickness per the glass chart to the requirements of PA202. Since in this example the unit is a fixed window, these units do not need to undergo the forced entry requirements. If it were an operable unit, all three units must be tested for forced entry. These three samples will qualify the given size window with the glass tested.

WI8: (Q124:) When testing a casement window which has three separate locks that are not activated by single action hardware, what is the test sequence in PA202?

A: First, engage all locks and perform the air infiltration test.

Second, disengage all locks and only engage the center-most (main) lock. Perform the 75-mph load test and water test as described in PA202.

Third, engage the other two locks and perform the remaining procedures in PA202. F.E.R. shall be done with all locks engaged.

WI9: I have performed the air infiltration, ½ test loads, design loads, and water infiltration tests on a glazed product per PA202. While conducting the test loads (1.5 x design load) a light on the unit broke. Can I re-glaze the same unit and continue with the testing?

A: Yes, you can re-glaze the light on the same specimen and perform the following structural loads: ½ test load, design load, and test load (both positive and negative). Note, the re-glazing procedure will be allowed as many times as there are lights on the specimen, but in no case shall any light be replaced more than once on a given specimen.